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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,095	09/17/2003	Morgan D. Murphy	DP-309055	6183
22851	7590	06/29/2004	EXAMINER	
DELPHI TECHNOLOGIES, INC.			DAVIS, OCTAVIA L	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			2855	

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/665,095	MURPHY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Octavia Davis	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Fortune et al.

Regarding claim 1, Fortune et al an improved weight estimation apparatus comprising a bladder 24, 30 disposed in a seat 12 and a rigid member 32 having a non- uniform rigidity defined by multiple regions of substantial rigidity separated by multiple regions of insubstantial rigidity such that said multiple regions of substantial rigidity effect regional transfer of occupant weight, determined by a controller 46, to said bladder while protecting said bladder from puncture damage and limiting bladder sensitivity to irregularities of said seat (See Col. 2, lines 42 – 66 and (Col. 3, lines 8 – 12).

Regarding claim 6, a cushioning layer 58 has non-uniform thickness (See Col. 4, lines 25 – 37).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 – 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fortune et al in view of Van Voorhies.

Regarding claims 2, 3, 7 and 8, Fortune et al disclose all of the limitations of these claims except for a teaching that the panel includes multiple plates of substantial rigidity affixed to said base sheet. However, Van Voorhies discloses a weight sensor comprising a plurality of interfaces 204 including multiple sheets or plates 17, 19 formed from a load cell element 15 and affixed to a seat cushion foam 44 (See Col. 10, lines 1 – 4 and 30 – 41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fortune et al according to the teachings of Van Voorhies for the purpose of, providing a weight sensor with increased flexibility to enable the entire assembly to conform to the deflections of the seat cushion (See Van Voorhies, Col. 6, lines 33 – 41).

Regarding claims 4 and 5, Fortune et al disclose all of the limitations of these claims except for a teaching that the multiple plates exhibit different degrees of rigidity and different thicknesses. However, in Van Voorhies, the sheets or plates 17, 19 exhibit different degrees of rigidity and different thicknesses (See Col. 11, lines 2 1- 29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fortune et al according to the teachings of Van Voorhies for the purpose of, providing a weight sensor which is responsive to loads over a large area of the seat without regards to the distribution or the amount of loading (See Van Voorhies, Col. 8, lines 33 – 38).

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***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gray et al (6,578,871) teach an improved occupant detection system and method.

Cech et al (6,056,079) teach an automotive seat weight sensing system.

VanVoorhies (5,918,696) teaches a seat weight sensor with means for distributing loads.

Aoki et al (6,571,647) teach a seat weight measuring apparatus.

6. Any inquiry concerning this communication should be directed to Examiner Octavia Davis at telephone number (571) 272 - 2176. The examiner can normally be reached on Monday - Thursdays (9:00 - 5:00), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on (571) 272 - 2180. The fax phone number for the organization where this application where this application or proceeding is assigned is (703) 872 - 9306.



OD/2855

6/17/04



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